SERVICE PACK 4

SOMO® 655

Release Notes and Installation Guide

Version: 1.00.04 SP4 (build 11960)

Copyright Notice

Copyright © 2012-2014 Socket Mobile, Inc. All rights reserved.

Socket, the Socket logo, SoMo, SocketCare, SocketScan, Connect!Agent, and Wi-Fi Companion are trademarks or registered trademarks of Socket Mobile, Inc. *Bluetooth* and the *Bluetooth* logos are registered trademarks owned by *Bluetooth* SIG, Inc., U.S.A. and licensed to Socket Mobile, Inc. Wi-Fi and the Wi-Fi logo is a registered trademark of the Wi-Fi Alliance. Windows Mobile is a trademark of the Microsoft group of companies. All other brand and product names are trademarks of their respective holders.

The SoMo 655 includes technology licensed under European Community Registered Design Nos. 000745245-0001, 000745245-0002 and 000745245-0003.

Reproduction of the contents of this manual without the permission of Socket Mobile is expressly prohibited. Please be aware that the products described in this manual may change without notice.

Feel free to contact Socket Mobile at:

Socket Mobile, Inc.
39700 Eureka Drive
Newark, CA 94560-4808
USA

www.socketmobile.com/contact

Other than the above, Socket Mobile can assume no responsibility for anything resulting from the application of information contained in this manual.

Please refrain from any applications of the SoMo 655 that are not described in this manual. Please refrain from disassembling the SoMo 655. Disassembly of this device will void the product warranty.

You can track new product releases, software updates and technical bulletins by visiting the Socket Mobile website at: www.socketmobile.com

Release Notes

1) **User Interface Improvements*:**

    a. eWFC has been renambed to Go Wi-Fi!

    b. Go Wi-Fi! Is preinstalled

    c. Added program to back date to Wireless Zero Config

2) **SocketScan Plug-in Updates:**

    a. Added support the 6E2/6E2Rx RFID Reader with NFC and 6P2/6P2Rx with NFC & Scan Cards.

    b. Added support for the 5P Rev H CF Scan Card which has the SE-965 Scan Engine.

    c. Corrected memory overflow issue*

3) **Go Wi-Fi! Updates:**

    a. Improved roaming in Mixed Mode security environments.

    b. More robust communications during Network Authentication phase.

    c. Fixed minor issues with Hidden networks (when SSID is not broadcasted).

    d. Roaming among multiple Hidden Networks is supported (controlled via Wi-Fi Region)

    e. Improved support for very large programs*

    f. Eliminated infrequent lockup during resume*

    g. Fixed issues when attempting to connect to non-existent or out of range Access points*

4) **Includes the Windows Embedded Handheld 6.5 Adaptation Kit Update (AKU) 6.5.3.12.24 from Microsoft, which resolves or implements the following issues:**

    a. Fixed remote code execution vulnerabilities in Internet Explorer caused by object handling in memory.

    b. Added support for customer-defined input Bluetooth HID queue size in Hidmdd.lib

    c. Fixed a vulnerability in Internet Explorer that occurred while downloading page content with undetermined encoding from an unknown server.

    d. Fixed a remote code execution vulnerability in Internet Explorer that could steal sensitive information from the user.

    e. Fixed an exception that occurred when creating multiple Outlook contacts in the Contacts application.

f. Fixed a remote code execution vulnerability caused by an Internet Explorer script injection.

g. Corrected the drawing of the title text in the Contacts application.

h. Corrected the handling of the uppercase conversion of a registry path string in a Turkish locale.

i. Corrected the behavior of an Alt key press when a Remote Desktop Connection (RDC) client session is ON.

j. Increased the width to ensure the correct display of time and time style in the settings for all regions and locales.

k. Added physical pages cache-memory support for OMAP4 devices.

l. Synchronized events during a file transfer when using Ethernet and the RNDIS/USB8023 driver.

m. Corrected the handling of the GID_SCROLL message in tab control.

n. Corrected the logic for the DeleteIpNetEntry function so it works when an Exchange ActiveSync connection that uses USB PPP is active.

o. Corrected the logic for the GetIpNetEntry function so it works when an Exchange ActiveSync connection that uses USB RNDIS is initialized.

p. The value of the global context switch during run time is now loaded correctly.

q. Corrected the logic for the display of the messaging application interface.

r. The Supported Time Zones list was updated to include new and updated information

s. Additional space for version information for Japan and Czech locales.

t. Corrected the ID used when displaying the beam icon for large file transfers.

u. Updated logic for displaying a Bluetooth icon on the Home screen.

v. Support for displaying new SMS message icon after restarting for Pocket PC devices.

w. Changes to help prevent Data Abort errors in Mshtml.dll caused by buffer issues.

x. New build environment variable to support customized startup function.

y. Time zones for default cities in Clocks & Alarms have been updated.

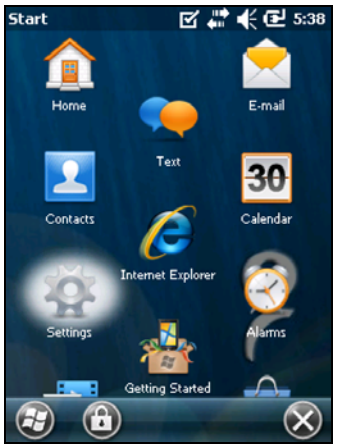
* Implemented in SP3

To download the latest Service Pack (SP), please log into your Support account at http://support.socketmobile.com/ and click on the green arrow .

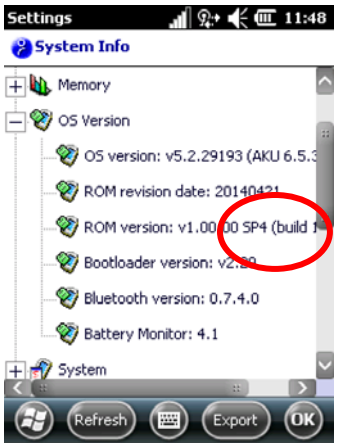
To check the SP version on your unit, see instructions below.

Check the SP Version of Your Unit.

From the Start screen, tap on **Settings | System | System Info.**



Tap on **OS Version** to view information.



Service Pack version = SP4

If you need to update your SoMo with the latest Service Pack, follow the instructions for installation below.

Installation Guide:

WARNING: You will lose all data files and applications during the upgrade process!

STEP 1: Power the Device

Socket highly recommends that you plug the SoMo 655 into an external power source using the charging cable/cradle. Alternatively, make sure the SoMo battery is adequately charged.

STEP 2: Back up Data on the Device

If you have any data on the SoMo 655, please back it up to an external location before you run the update.

STEP 3: Transfer Files using a Memory Card

IMPORTANT: It is not recommended you transfer files using ActiveSync or the Windows Mobile Device Center!

The directory SOMO655 containing the ROM image files must be moved to the SoMo 655 with a microSD or CF memory card that is formatted in FAT12 or FAT16. Make sure your memory card has at least 40 MB of free space.

Most higher-capacity cards are formatted by default in FAT32, which is not supported. SDHC cards are not supported in Windows Embedded Handheld.

If you want to reflash from a CF card, make sure you do not have a microSD card in the microSD slot.

1. On your PC, use **My Computer** or **Windows Explorer** to locate the directory **SOMO655**, which contains the upgrade files.
2. Copy the SOMO655 directory to the root of your memory card.

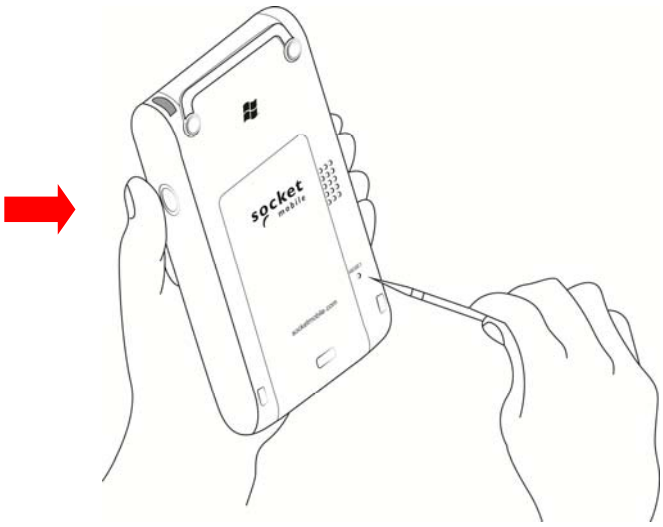
IMPORTANT: Copy the SOMO655 directory to the root of the memory card! DO NOT change the name of the folder!

Good Example: F:/SOMO655 **Bad Example: F:/Socket/SOMO655** **Bad Example:**

3. Insert the memory card into the device.

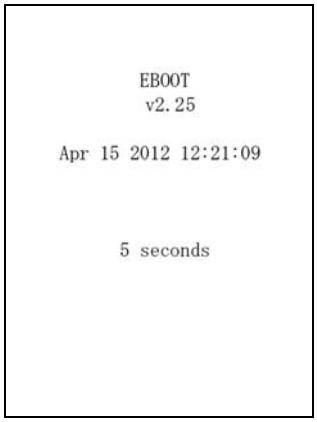
STEP 4: Install the Files

4. Press and hold the **Right Programmable Application** button on your SoMo 655.
5. While holding the button, use the stylus to gently press the **Reset** button on the back of your SoMo 655. Keep holding the **Right Programmable Application** button.



6. An EBOOT screen will appear with a timer, counting down from 5 seconds.

IMPORTANT: Keep holding the Right programmable application button until the timer reaches 0 seconds! Otherwise the installation will be aborted.



7. The SoMo 655 will begin to download and update the ROM image.
8. After the installation reports, **"Update completed!"** the Socket splash screen will appear for about 30 seconds then disappear.

Socket Splash

9. The Windows Embedded Handheld splash screen will appear for about 30 seconds.
10. The Windows Welcome wizard will prompt you to set up Windows Mobile. Follow the instructions on your screen.
11. After setting up Windows Embedded Handheld, the Today screen will appear, and the SoMo 655 will be ready to use.

Today

Enhanced Wi-Fi Companion Advanced Features

The features described in this appendix are for ADVANCED USERS ONLY.

For software setup instructions, please refer to Chapter 2.

For basic connection instructions, please refer to Chapter 4.

View IP Addresses

You can only view IP address data if the SoMo is actively connected to a WLAN network.

12. In the main screen of e-WFC, tap on the device icon. In the pop-up menu, tap **IP Addresses**.

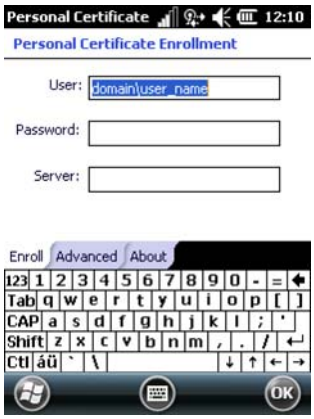
The IP Addresses screen will appear.

If your network uses DHCP, the **Renew** and **Release** functions will be enabled. Tap **Renew** to get a new IP address and/or update related lease data. Tap **Release** to release the IP address from the DHCP server.

Enroll Certificate

13. In the main screen of e-WFC, tap **Menu | Certificates | Enroll**.

Use the Personal Certificate Enrollment utility to install a personal certificate for 802.1x networks running EAP-TLS authentication.



Manage Certificates

14. In the main screen of e-WFC, tap **Menu | Certificates | Certificates**.

Use the utility to manage your root, personal and intermediate authentication certificates. To view a certificate, tap and hold the stylus on a certificate in the list. In the pop-up menu, tap **View**.

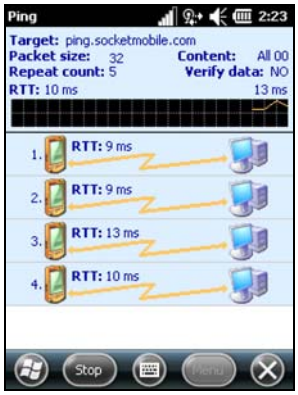
Certificates 5:09
Intermed... Root Personal
Use root certificates to positively identify root certification authorities.
Issued By Expires
VeriSign Trust Network 8/1/28
VeriSign Class 3 Public... 7/16/2036
VeriSign Class 3 Public... 7/16/2036
Thawte Server CA 12/31/20
thawte Primary Root CA 7/16/2036
Thawte Premium Serv... 12/31/20
Starfield Class 2 Certifi... 6/29/2034
Secure Server Certific... 1/7/10
http://www.valicert.c... 6/25/19
GTE CyberTrust Globa... 8/13/18
OK

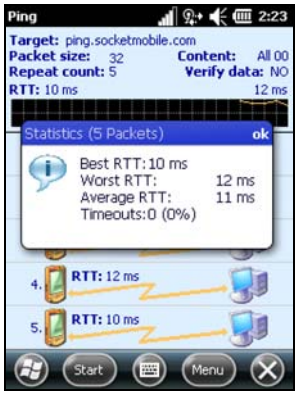
Trace Route

15. In the main screen of e-WFC, tap **Menu | Trace Route**.
16. Tap **Menu | Configure**. Enter the appropriate settings and tap **OK**.
17. Tap **Start**. Tap **Stop** to end the trace at any time, or let the trace run until complete. A prompt will report the statistics. Tap **ok**. To view the full host name of any of the hops, tap on the hop in the list.

Ping

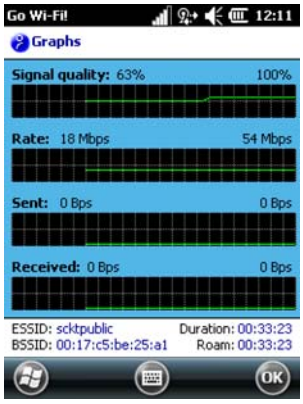
18. In the main screen of e-WFC, tap **Menu | Ping**.
19. Tap **Menu | Configure**. Enter the appropriate settings and tap **OK**.
20. Tap **Start**. To end the test, tap **Stop**. A prompt will report the statistics. Tap **ok**.





Statistical Graphs and Tables

21. In the main screen of e-WFC, tap **Menu | Statistics**.
22. In the pop-up menu, tap **Graphs** to view scrolling line graphs of the signal quality, rate, and sent and received data rates. Alternatively, tap **Tables** to view tables of information about the current connection. Tap on the tabs and scroll to view all the data.



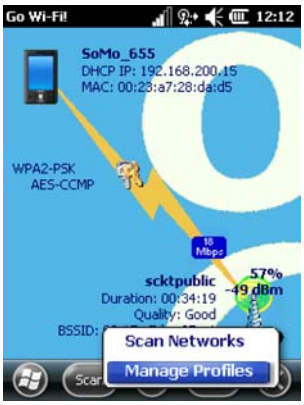
Manage Profiles

The Manage Profiles screen displays the configured networks (i.e., profiles) and allows you to rank the networks in order of priority for connection attempts.

23. In the main screen of e-WFC, tap and hold the stylus on the radio tower icon. In the pop-up menu, tap **Manage Profiles**. Alternatively, tap **Menu | Settings | Manage Profiles**.

A list of network profiles will appear. To configure a new network profile, tap **New** and follow the Configure Wireless Network wizard. To search for available networks, tap **Scan**.

Tap and hold the stylus on any profile in the list to reveal a pop-up menu that enables you to quickly connect to, edit or delete the selected profile. If multiple profiles are listed, you can also set their order of priority by moving profiles up or down in the list. The SoMo will try to connect to the #1 ranked network, then #2 etc. until a connection is made.



Profile Icons

	Current connection. This icon appears only when multiple profiles are listed.
	Signal strength of strongest AP (access point)/ad hoc radio
	WEP encryption, WPA (PSK), WPA (TKIP), WPA2 or 802.1x
	No encryption
	Priority ranking.
	Profile saved
	802.11b, 802.11g, 802.11n

Power Save

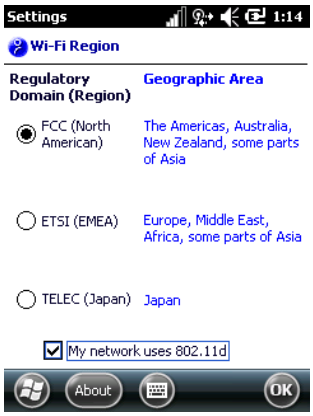
24. In the main screen of e-WFC, tap **Menu | Settings | Power Save**.

For automatic power management, check the box **Manage the radio power automatically**. This will enable best performance when charging and best power savings when running on battery power. Alternatively, uncheck the box and use the slider to manually choose your power setting. Tap **OK**.

Wi-Fi Region

25. In the main screen of e-WFC, tap **Menu | Settings | Wi-Fi Region**.
26. Select your region. If your network uses 802.11d, check the box at the bottom of the screen. Tap **OK**.

> *If your Wi-Fi environment supports multiple hidden networks (i.e., access points that don't broadcast their SSID, make sure to uncheck the box My network uses 802.11d.*

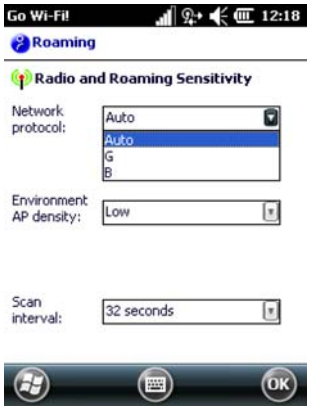


Roaming

27. In the main screen of e-WFC, tap **Menu | Settings | Roaming**.

Enter the appropriate settings and tap **OK**.

1. **Network protocol:** Select **Auto** for the software to automatically choose the appropriate mode, select **G** for 802.11g or select **B** for 802.11b.
2. **Environment AP density**: Select the relative density of access points in your environment to adjust how aggressively the SoMo will roam from one access point to another.



Diagnostics

In the main screen of e-WFC, tap **Menu | Settings | Diagnostics**. The binding information is for Socket Mobile technical support only and not for use by the end user.

Logging

In the main screen of e-WFC, tap **Menu | Settings | Logging**. The log files can be sent to Socket Mobile technical support to troubleshoot connection issues.